

May 29, 2007

MEMORANDUM

TO: Mr. Steve Murray, P.L.S. - Tippecanoe County Surveyor

FROM: David W. Eichelberger, P.E. - CBBEL, Indianapolis

PROJECT: **Harrison High School Planned Improvements
CBBEL Project No. 02-038 (FJ)**

DEVELOPER/OWNER: **Tippecanoe School Corporation**

LOCATION: **40° 30' 05" Latitude
-86° 54' 54" Longitude**

RECOMMENDATION: **Final Approval with Conditions**

Planned improvements at the Harrison High School campus include the construction of an academic building adjacent to a newly paved driveway with off-set parking strips, renovation of the varsity baseball field concession stand, and expansion of an existing stormwater detention pond. The school property is located southeast of the intersection of County Roads 600 North and 50 West (County Farm Road) and contains approximately 77 acres. Since construction of the original school complex in 1968, subsequent improvement projects have been completed to expand the main academic building, increase available parking areas, and provide athletic fields and locker room facilities. The north half of the campus drains to Burnett's Creek, while the south half drains directly to Cole Ditch. Cole Ditch, which ultimately outfalls into Burnett's Creek, passes through the southeast portion of the school property.

The newest planned improvements occur within the north watershed to Burnett's Creek. The new Academic Building involves the removal of the temporary classroom north of the horticultural greenhouse and the addition of about 15,000 square feet of rooftop area. The construction area for the proposed Academic Building is approximately 1.6 acres. The existing two-story concession stand will be "replaced in kind" by a combination concessions/restroom building to be relocated along with the existing bleachers. The reconfigured area will require minor finished grade changes. The applicant has indicated that construction of the new academic building and the concession stand has been completed.

Lastly, the downstream detention pond will be maximized within available space north of the softball and baseball fields to accommodate increased runoff from the Academic Building and paved areas. Some runoff from the watersheds east of the pond, which previously drained in the opposite direction, will be re-directed to the pond. The detention pond (Pond B1) will expand from a total volume capacity of 0.204 ac-ft to a capacity of 1.017 ac-ft. The pipe outlet will be reduced from a diameter of eighteen (18) inches to a 12-inch diameter pipe fitted with a 5-inch orifice plate.

As previously mentioned, Cole Ditch passes through the southeast portion of the school property and eventually outfalls to Burnett's Creek, which is east of the school property. This project will not outlet to the Cole Ditch Regulated Drain. This development will not have any proposed regulated drain crossings or encroachments. The project site is located within the Tippecanoe County MS4 Area but not within a 305(b) priority watershed.

This project was discussed in a meeting held at the Tippecanoe County Surveyor's Office on August 2, 2006 and previously reviewed in memorandums dated September 19 and October 27, 2006. After a review of the most recently provided information, CBBEL recommends final approval of the stormwater management plan with the following conditions:

Variances/Encroachments

There are no variances or regulated drain encroachments proposed with this project.

Stormwater Quantity

The proposed stormwater management plan appears to be in substantial compliance with the Ordinance and Standards.

Stormwater Quality

1. The applicant still should submit a signed copy of the Notice of Intent (N.O.I).
2. The applicant has provided an Operation and Maintenance Manual. This manual contains at least one reference to a different TSC project. The applicant should submit a final revised O & M Manual.
3. The applicant has submitted a "Commercial Property Recorded Master Covenant and Agreement Regarding On-Site BMP Maintenance and Drainage". This agreement lists the stormwater quality devices proposed for the subject development. The agreement should also list all stormwater quantity devices proposed for the subject project, including storm sewers, swales, and/or culverts that have been, or will be, constructed or modified with the new academic building and concession stand construction. In addition, this agreement must be signed, dated, and notarized. This agreement must be recorded before final plan approval and sign-off will be granted by the Tippecanoe County Surveyor's Office.

General Conditions

1. The applicant must pay any final drainage review fees per Ordinance 2005-04-CM and submit a letter to the County Surveyor's Office stating that these fees will be paid.
2. The applicant must pay the Phase II stormwater program fees.
3. If no assurance is required under the Unified Subdivision Ordinance, Section 4.1, the Comprehensive Stormwater Management Ordinance of Tippecanoe County (Ordinance) still requires an assurance, made out to the Tippecanoe County Drainage Board, for an amount equal to 100% of the total costs of implementing measures required by Chapters 3, 4, and 5 of the Ordinance. See Chapter 6, Section 7 of the Ordinance for more information.

4. The property owner, developer, or contractor shall be required to file a three-year maintenance bond or other acceptable guarantee with the Tippecanoe County Drainage Board, prior to final approval, in an amount not to exceed ten percent (10%) of the cost of the stormwater drainage system located outside the public road right-of-ways. See Chapter 6, Section 9 of the Ordinance for more information.
5. All listed issues must be completely addressed before final plan approval and sign-off will be granted by the County Surveyor's Office.

No error or omission in the plans, calculations or applications (whether said plans, calculations or applications have been reviewed by the review engineer or not) shall permit or release the applicant and designer from constructing this work in any other manner than that provided for in the County Ordinance.

pc: T-Bird Engineering

DWE/jd

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